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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,246	01/03/2002	Arthur W. Brooking	MS155556.1	7885

7590 03/14/2007

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EXAMINER	
TRUONG, LAN DAI T	
ART UNIT	**PAPER NUMBER**
2152	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/038,246	BROOKING ET AL.	
	Examiner	Art Unit	
	Lan-Dai Thi Truong	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4 and 6-60* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,4 and 6-60* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/21/2006 has been entered.

2. This action is response to communications: application, filed on 01/03/2002; amendment filed 12/21/2006. Claims 1, 3-4, 6-20 are pending ; claims 2, 5 are canceled; claims 1, 4, 8, 13, 17-20 are amended

3. The applicant's arguments filed on 12/21/2006 have fully considered but they are moot in view with new ground for rejections

Response to Arguments

4. Regarding Applicant's arguments with respect to the references do not disclose the use of a lexical set for determining subsets of the raw network data to copy are not persuasive; this feature is taught by the Flowers, see (column 2, lines 20-60; column 4, lines 17-20; column 10, lines 19-29, 51-54), Flowers discloses method for using a set of lexical rules stored in VDS for monitoring/ and analyzing network performance

5. Regarding Applicant's arguments with respect to the references do not disclose the lexical rule set stores information regarding structure of subsets of data and protocol specific

information are not persuasive; this feature is taught by the Flowers, see (column 2, lines 20-60; column 4, lines 17-20; column 10, lines 19-29, 51-54), Flowers discloses a set of lexical rules comprises entities e.g. "applications, ports, actions" those share functionality with "information" as claimed, and protocols;

6. In response to applicant's arguments that the Flowers fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the diagnostic engine, upon initialization, stores information associated with protocols to be monitored in the at least one lexical rule set, upon occurrence of a network connectivity problem, stores information associated with addition protocols, and upon correction of network problem, deletes information associated with selected protocols from the at least one lexical rule set) are not recited in the rejected claim(s) filed on 04/11/2006. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

7. In response to Applicant's arguments with respect to the distinguishes between the Kerft and the claimed limitations such as stream monitor/ multiplexing component data access real-time network data and selectively determines at least one subset of the real-time network data to multiplex based in part upon a lexical rule set and a data stream distribution engine that de-multiplexes the multiplexed data based in part upon the lexical rule set and, diagnostic engine having a plurality of protocol state compressor; because the new art e.g. Silva et al. (U.S. 6,360,268) is used for this feature rejections, so the arguments are not addressed

8. Regarding Applicant's arguments with respect to the Morgan does not disclose a diagnostic engine comprising a lexical rule set which stores information regarding the structure

of subsets of data and protocol specific information are not persuasive; this feature is taught by Flowers et al. (U.S. 6,957,348) e.g. Flowers discloses a network detection system, which is used to check network conditions; the network detection system using a set of lexical rules stored in VDS used for monitoring/ and analyzing network performances. The lexical rules define such as applications, ports, protocols, and associated actions; wherein the action direct the system to monitor for particular information in IP packets: (column 2, lines 20-60; column 4, lines 17-20; column 10, lines 19-29, 51-54)

Claim rejections-35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or descry bed as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-4, 7 and 19-20 are rejected under 35 U.S.C 103(a) as being un-patentable over Sheldon et al. (U.S. 2003/0081125) in view of Flowers et al. (U.S. 6,957,348) and further in view of Justice, Jr. et al. (U.S. 6,418,469)

Regarding to claim 1:

Sheldon discloses a system, which can be implemented in a computer hardware or software code for network diagnostic, comprising:

A diagnostics engine comprising at least one protocol state compressor to analyze the respective data subsets of raw network data; the diagnostics engine determines condition of

network connectivity: (Sheldon discloses the video packets transmitted to "diagnostic node" which caries functionality of "state compressor" to analyze the performance of video device; Sheldon also discloses the diagnostic node analyzes audio visual data passed through the network to determine performance statistics information and provides "the results of the analysis" which is equivalent to "Diagnosing heath status" of video device such as status of connections between the video device and endpoints: [0004]; [0008]-[0009]; [0017]-[0018])

However, Sheldon does not explicitly disclose the data stream monitor component accessing raw real-time network data utilizes at least one lexical rule set associate with at least one protocol state compressor to determine subsets of the raw network data to copy; the at least one lexical rule set stores at least one of information regarding structure of subset data and protocol specific information

In analogous art, Flowers discloses a network detection system, which is used to check network conditions; the network detection system using a set of lexical rules stored in VDS used for monitoring/ and analyzing network performances. The lexical rules define such as applications, ports, protocols, and associated actions; wherein the action direct the system to monitor for particular information in IP packets: column 2, lines 20-60; column 4, lines 17-20; column 10, lines 19-29, 51-54)

Wherein the diagnostic engine, upon initialization, stores information associated with protocols to be monitor in at the at least one lexical rule set: (As similar to rejections for the limitation above, Flowers discloses a set of lexical rules comprises entities e.g. "applications, ports, actions" those share functionality with "information" as claimed, and protocols; the set of

lexical rules stored in VDS, see (column 2, lines 30-32, 41-60); Flowers further discloses the data in VDS is automatically received from servers, see (column 3, lines 29-67)

However, Sheldon- Flowers does not explicitly disclose upon occurrence of a network connectivity problem, stores information associated with additional protocols, and upon correction of the network problem, deletes information associated with selected protocols from the at least one lexical rule set

In analogous art, Justice discloses network managing system includes action lists log which automatically updated e.g. added or remove entries from the action lists log if problem condition appears or already resolved, see (abstract, lines 5-8; column 1, lines 1-67; column 3, lines 54-58; column 6, lines 1-19)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Justice's ideas of removing entries from action lists log if condition is resolved and Flowers's ideas of applying lexical rules stored in VDS used for monitoring/ and analyzing network performances with Sheldon's system in order to provide an efficient network management system such saving memory /and or providing instantly network connections conditions, see (Justice: column 1, lines 1-21)

Regarding to claims 3-4 and 20:

Those claims are rejected under rationale of claim 1

Regarding to claim 7:

Sheldon-Flowers-Justice discloses a method as discuss in claim 4, which further includes providing information to a user regarding the health status of the system: (Sheldon discloses the step of reporting "performance statistic" which is equivalent to "health status" to the server: page 4, left column, lines 5-6)

Regarding to claim 19:

Sheldon-Flowers-Justice discloses a method as discuss in claim 1, which further includes an event correlator/inference engine correlates the results to detect a system problem: (Flowers discloses method for correlates test results: column 5, lines 30-40)

Claim 6 is rejected under 35 U.S.C 103(a) as being un-patentable over Sheldon-Flowers-Justice in view of Bereiter et al. (U.S. 6,357,017)

Regarding to claim 6:

Sheldon- Flowers- Justice discloses the invention substantially as claim 4, comprising:

Diagnosing a network connectivity problem based at least in part upon the analysis of at least one of the protocol state compressors: (Sheldon discloses the diagnostic node analyzes audio visual data passed through the network to determine performance statistics information and provides "the results of the analysis" which is equivalent to "Diagnosing heath status": [0017], lines 10-14; [0018, lines 8-10)

However, Sheldon- Flowers does not explicitly discloses method of initiating corrective action associated with network connectivity problem

Bereiter discloses method of diagnostic and correcting, see (Bereiter: abstract, lines 16; column 1, lines 46-59; column 2, lines 24-40)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Bereiter's ideas of problem resolution with Sheldon- Flowers-Justice's system in order to efficiency diagnostic system.

Claims 8-14 are rejected under 35 U.S.C 103(a) as being un-patentable over Sheldon-Flowers-Justice in view of Silva et al. (U.S. 6,360,268)

Regarding to claim 8:

Sheldon-Flowers-Justice discloses the invention substantially as disclosed in claim 1, but does not explicitly teach multiplexing the copied raw data frames; de-multiplexing the copied raw data frames

In analogous art, Silva discloses the diagnostic equipment includes multiplexer, see (figure 8, items 108)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Silva's ideas of including a multiplexer in the diagnostic equipment with Sheldon-Flowers-Justice's system in order to be able to re-ordering transmitted testing packets and reducing transmitting packets lost

Regarding to claims 9- 13:

Those claims are rejected under rationale of claim 8

Regarding to claim 14:

In addition to rejection in claim 13, Sheldon-Flowers-Justice - Silva further discloses determining whether an additional protocol to be monitor has been added; and adding protocol

state compressor and corresponding lexical rules set associated with the additional protocol: (Flowers: column 4, lines 30-49)

Claim 15 is rejected under 35 U.S.C 103(a) as being un-patentable over Sheldon-Flowers-Justice - Silva in view of Morgan et al. (U.S. 2002/0144187)

Regarding to claim 15:

Sheldon-Flowers-Justice - Silva discloses the invention substantially as disclosed in claim 13, but does not explicitly teach initiating corrective action based at least in part upon the correlation information

Morgan discloses a self-healing system comprises a diagnostic component adapted to determine at least one network attribute and to render the network attribute to a user, see (Morgan: abstract, lines 1-16)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Morgan's ideas of render the network attribute to a user with Sheldon-Flowers-Justice - Silva 's system in order to provide real-time network attribute to the user

Claim 16 is rejected under 35 U.S.C 103(a) as being un-patentable over Sheldon-Flowers-Justice- Silva in view of Korkosz et al. (U.S. 6,781,513)

Regarding to claim 16:

Sheldon-Flowers-Justice - Silva discloses the invention substantially as disclosed in claim 13, but does not explicitly teach at least one of the following acts:

Storing historical information regarding the health status of the network activity, Determining potential sources of a problem associated with network connectivity; Accessing historical information regarding the health status of network connectivity: (Korkosz: Read/Write memory stores history of the system performance: column 5, lines 66-67; column 6, lines 1-12)

Calculating a probability of utility based at least in part upon the potential sources on the problem and accessed historical information: (Korkosz: column 4, lines 35-67; column 5, lines 1-65)

Consecutively initiating corrective action based at least in part upon the probability of utility: (Korkosz: monitoring the performance of equipment and system in order to initiate a maintenance cycle: column 1, lines 38-45)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Korkosz's ideas of storing history of system performance and calculation error rate based on the history with Sheldon-Flowers-Justice - Silva's system in order to provide efficiency maintenance service, see (Korkosz: column 1, lines 23-36)

Claims 17-18 are rejected under 35 U.S.C 103(a) as being un-patentable over Bereiter et al. (U.S. 6,357,017) in view of Morgan et al. (U.S. 2002/0144187) in view of Flowers et al. (U.S. 6,957,348) and further in view of Justice, Jr. et al. (U.S. 6,418,469)

Regarding to claim 17:

Bereiter discloses the invention substantially as claimed, including a system, which can be implemented in a computer hardware or software code for facilitating network diagnostics, comprising:

A plain language notification data information store storing plain language notification information associate with plurality of potential server problem; A protocol specific event information data store storing information associated with server health status: (Bereiter discloses a diagnostic engine used to generate a data set indicative of a current operating state of "the client machine" which is equivalent to "server": abstract, lines 1-17; column 1, lines 45-59; column 2, lines 24-52)

However, Bereiter does not explicitly disclose a Self healing component adapted to analyze information stored in the protocol specific event information to determine at least one of appropriate corrective action and appropriate plain language notification, the plain language notification based at least in part upon information stored in the plain language notification data store

However Morgan discloses self-healing system used to diagnostic a system. The self-healing system also provides fixing methods: [0010])

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Morgan's ideas of using Self healing component adapted to determine at least one of appropriate corrective action with Bereiter's system in order to reduce a mount of time spent troubleshooting a network computer, see (Morgan: [0007])

However Bereiter- Morgan does not explicitly disclose at least one lexical rule set stores at least one of information regarding structure of subset data and protocol specific information:

In analogous art, Flowers discloses a network detection system, which is used to check network conditions; in the Flowers' system, a set of lexical rules stored in VDS used for monitoring/ and analyzing network performance. The lexical rules define such as applications,

ports, protocols, and associated actions; wherein the action direct the system to monitor for particular information in IP packets; the set of lexical rules comprises entities e.g. "applications, ports, actions" those share functionality with "information" as claimed, and protocols; the set of lexical rules stored in VDS: column 2, lines 20-60; column 4, lines 17-20; column 10, lines 19-29, 51-54)

However, Bereiter- Morgan- Flowers does not explicitly disclose upon occurrence of a network connectivity problem, stores information associated with additional protocols, and upon correction of the network problem, deletes information associated with selected protocols from the at least one lexical rule set

In analogous art, Justice discloses network managing system includes action lists log which automatically updated e.g. added or remove entries from the action lists log if problem condition appears or resolved, see (abstract, lines 5-8; column 1, lines 1-67; column 3, lines 54-58; column 6, lines 1-19)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Justice's ideas of removing entries from action lists log if condition is resolved and Flowers's ideas of applying lexical rules stored in VDS used for monitoring/ and analyzing network performances with Bereiter- Morgan's system in order to provide an efficient network management system such saving memory /and or providing instantly network connections conditions, see (Justice: column 1, lines 1-21)

Regarding to claim 18:

This claim is rejected under rationale of claim 17

The prior arts made of records and not relied upon are considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "System and method facilitating network diagnostics and self-healing": 6992991; 6983317; 7,120,676; 6269330; 6189031

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan-Dai Thi Truong whose telephone number is 571-272-7959. The examiner can normally be reached on Monday- Friday from 8:30am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob A. Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

03/12/07

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